REBUTTAL TESTIMONY

of

Mike Luth
Rate Analyst

Rates Department
Financial Analysis Division
Illinois Commerce Commission

Request for Approval of Revisions to Delivery Services Tariffs and for Approval of Delivery Services Implementation Plan for Residential Customers

Central Illinois Public Service Company, d/b/a AmerenCIPS
and
Union Electric Company, d/b/a AmerenUE

Docket No. 00-0802

June 20, 2001

Witness Identification

Q. Please state your name and business address.

A. Mike Luth, Illinois Commerce Commission, 527 East Capitol Avenue, Springfield, Illinois 62701.

Q. Are you the same Mike Luth who pre-filed direct testimony in this docket, which was identified as ICC Staff Exhibit 5.0 with accompanying schedules?

A. Yes, I am.

Introduction to Testimony

Q. What is the subject matter of this rebuttal testimony?

A. There are four major subjects covered in this testimony:

1) Present the revised results of my analysis of the Cost of Service Studies ("COSS") prepared by Ameren witness Difani (Ameren Exhibit Nos. 9.0, 9.2 and 9.3), which include the effects of any changes in Staff's position on revenue requirements for AmerenCIPS and AmerenUE,

2) Reply to Ameren's comments concerning the difference between Staff witness Lazare's testimony and my testimony in allocating General Plant-in-Service and Administrative and General Expenses among the AmerenCIPS and AmerenUE delivery services rate classes,

3) Reply to Ameren's continued arguments in support of the Zero-intercept method of interclass revenue allocation, and

4) Comment on the revised unbundled metering rates discussed by Ameren witness Difani in his rebuttal testimony (Ameren Exhibit No. 17.0).

Q. Are you sponsoring any schedules as part of your rebuttal testimony?

A. Yes, I am.

Schedule 1 Delivery Services Cost of Service Allocation Study

Schedule 2 Delivery Services Rate Design

Both Schedule 1 and Schedule 2 are updates of what I presented in direct testimony, and reflect the changes that I will discuss in this testimony. Schedule 1 and Schedule 2 are prepared individually for CIPS and UE. CIPS schedules are identified by a -CIPS suffix and, similarly, the UE schedules are identified by a -UE suffix.

Q. What are the differences between the DST rates that you are proposing in this rebuttal testimony and the rates that you proposed in direct testimony?

A. The following table summarizes the differences between the rates that I am proposing and the rates that the Company is proposing[1]:

CIPS:

Delivery Services Rate Class	**Company Rate**	**Staff Direct Rate**	**Staff Rebuttal Rate**
Residential DS-1 customer charge	$ 17.08	$ 9.35	$ 9.61
Residential DS-1 per-kWh	$ 0.0170	$ 0.0198	$ 0.0199
Secondary General Service DS -2 customer charge	$ 20.00	$ 13.30	$ 13.29
Secondary General Service DS -2 per kWh	$ 0.0141	$ 0.0156	$ 0.0155

[1] Customer charges include metering rates. All Staff rates reflect the difference between Company and Staff proposed delivery services revenue requirement at the time of filing direct testimony and rebuttal testimony.

Delivery Services Rate Class	Company Rate	Staff Direct Rate	Staff Rebuttal Rate
Primary General Service DS -2 customer charge	$ 240.00	$ 151.55	$ 144.17
Primary General Service DS -2 per kWh	$ 0.0115	$ 0.0157	$ 0.0154
Secondary Large General Service DS-3 customer charge	$ 120.00	$ 141.01	$ 132.40
Secondary Large General Service DS-3 per kW	$ 4.63	$ 4.6906	$ 4.6601
Primary Large General Service DS-3 customer charge	$ 242.00	$ 1,019.14	$ 966.84
Primary Large General Service DS-3 per kW	$ 3.55	$ 3.0747	$ 3.0579
High Voltage Large General Service DS-3 customer charge	$ 1,271.00	$ 2,092.85	$ 1,959.55
High Voltage Large General Service DS-3 per kW	$ 2.05	$ 1.2006	$ 1.2041
138 kV+ Large General Service DS-3 customer charge	$ 5,318.00	$ 6,470.63	$ 6,673.10
138 kV+ Large General Service DS-3 per kW	$ 0.35	$ 0.2895	$ 0.2841

33 UE:

Delivery Services Rate Class	Company Rate	Staff Direct Rate	Staff Rebuttal Rate
Residential DS-1 customer charge	$ 16.94	$ 8.65	$ 8.83
Residential DS-1 per-kWh	$ 0.0112	$ 0.0124	$ 0.0128
Secondary General Service DS -2 customer charge	$ 23.43	$ 14.81	$ 14.38
Secondary General Service DS -2 per kWh	$ 0.0091	$ 0.0099	$ 0.0099
Large General Service DS -3 customer charge	$ 161.44	$ 203.29	$ 185.17
Large General Service DS -3 per kW	$ 2.96	$ 3.0135	$ 2.9406

Delivery Services Rate Class	Company Rate	Staff Direct Rate	Staff Rebuttal Rate
Primary Large General Service DS-4 customer charge	$ 322.07	$ 1,149.86	$ 1,095.70
Primary Large General Service DS-4 per kW	$ 1.53	$ 1.9915	$ 1.9794
High Voltage Large General Service DS-4 customer charge	$ 4,189.36	$ 6,582.10	$ 6,093.12
High Voltage Large General Service DS-4 per kW	$ 1.15	$ 0.5321	$ 0.5246
138 kV+ Large General Service DS-4 customer charge	$ 2,339.48	$ 4,828.71	$ 4,417.25
138 kV+ Large General Service DS-4 per kW	$ 0.99	$ 0.4852	$ 0.4783

Cost of Service Studies ("COSS")

Q. Please describe Schedule 1, Delivery Services Cost of Service Allocation Study.

A. Schedule 1, Delivery Services Cost of Service Allocation Study presents revisions to the cost of service proposals I presented in direct testimony. Schedule 1 is the summary of FERC account-by-account allocation of costs to delivery services rate classes.

Q. Please describe your proposed revisions to cost of service.

A. One change is to eliminate costs allocated to the Lighting delivery services rate classes associated with FERC account numbers 369-1 and 369-2, "Overhead Services" and "Underground Services", and allocate those costs to the other secondary delivery service rate classes based upon relative weight of those rate classes. The Company has explained to me that costs to the

Lighting classes are direct-charged, and any Services lines to Lighting customers are negligible.

The other changes are the allocation factors for General Plant-in-Service and Administrative and General Expenses ("A & G"). In direct testimony, I allocated General Plant-in-Service to the Ameren delivery services rate classes based upon the overall proportion of Distribution Plant-in-Service allocated to each rate class, and allocated A & G based upon overall distribution Operations and Maintenance Expense. In this rebuttal testimony, I am allocating General Plant-in-Service and A & G based upon the distribution labor allocation factor for each rate class. Distribution-related General Plant-in-Service and A & G are determined according to distribution labor, so it is reasonable to allocate General Plant-in-Service and A & G distribution costs according to the distribution labor attributable to each delivery service class.

Q. Were General Plant-in-Service and A & G distribution costs allocated to the Ameren delivery service classes according to labor in Docket No. 99-0121, which was the previous Ameren delivery services docket?

A. No, the Order in Docket No. 99-0121 allocated General Plant-in-Service according to the proportion of overall Distribution Plant-in-Service for each delivery service rate class, which was how I allocated General Plant-in-Service in direct testimony in this docket. A & G was allocated according to the

proportion of overall distribution O & M for each delivery service rate class, which was the method by which I allocated A & G in direct testimony.

Q. Why did you change the interclass allocation factors for General Plant-in-Service and A & G to distribution labor?

A. The Commission's Order in Docket No. 99-0121 functionalized General Plant-in-Service and A & G according to distribution labor. Since distribution labor from each delivery service rate class makes up the total of distribution labor used to functionalize General Plant-in-Service and A & G, it is reasonable to allocate general costs according to the same factor used to functionalize general costs to distribution.

Q. Does the change to an interclass distribution labor allocation factor mean that Staff witness Lazare is now using the same costs for General Plant-in-Service and A & G to determine a Single Bill Option credit for each delivery services rate class?

A. Yes, it does. Since Ameren and I are both using a distribution labor allocation factor to determine General Plant-in-Service and A & G costs charged to each delivery services rate class, Mr. Lazare's analysis begins with the same costs for General Plant-in-Service and A & G for each delivery services rate class.

Zero-intercept interclass revenue allocation

Q. Ameren witness Cooper continues to support the zero-intercept method of determining interclass revenue allocation. Are his arguments persuasive?

A. No, Mr. Cooper's arguments are a rehash of what has been previously presented to the Commission and rejected by the Commission in other dockets, including the Order in Docket Nos. 99-0120/99-0121, which was the previous Ameren delivery services docket.

Q. What is the major consideration in deciding whether to allocate costs according to the zero-intercept method or by demand?

A. The Commission should decide whether it is appropriate to charge the costs for common distribution equipment used to provide utility service based upon the number of connections to the distribution system by a given customer class, or charge according to the demand upon, or use of, the common distribution equipment by a given customer class. If the decision is to base charges upon the number of connections, then the zero-intercept method is appropriate. If the decision is to base charges upon the demand upon, or use of, the common distribution equipment by a given customer class, then a class demand allocation factor is appropriate, as is reflected in the allocation of costs that I am proposing.

Q. Why do you describe the zero-intercept method as complex, yet vague?

A. It is complex because it attempts to categorize costs of common, shared distribution equipment built to serve utility load as having a no-load component and a load (demand) component. It is vague because the purpose of determining the cost of a hypothetical zero-load distribution system is vague.

The steps necessary to complete the zero-intercept method are complex and painstaking. For example, the NARUC Manual analysis of account no. 364 "Poles, Towers, and Fixtures" is conducted as follows:

- Determine the number, investment, and average installed book cost of distribution poles by height and class of pole. (Exclude stubs for guying.)
- Determine minimum intercept of pole cost creating a regression equation, relating classes and heights of poles, and using the Class 7 cost intercept for each pole of equal height weighted by the number of poles in each height category.
- Multiply minimum intercept cost by total number of distribution poles to get customer component.
- Balance of pole investment is assigned to demand component.
- Total account dollars are assigned based on ratio of pole investment. (Transformer platforms in Account 364 are all demand-related. They should be removed before determining the account ratio of customer- and demand-related costs, and then they should be added to demand portion of Account 364.)[2]

When considering similar instructions for 4 other accounts, the expansiveness of the distribution system, and the extent of the accounting records supporting the construction of the distribution system over many decades, the engineering study necessary to prepare a zero-intercept method cost allocation study is

[2] From NARUC Manual, January 1992, pages 92 and 93

enormous. The level of detail required to complete the zero intercept COSS increases the potential for error. Simply stated, it is complex.

As has been discussed in previous Commission Orders in Docket Nos. 90-0007 and 88-0277, a distribution system is built to service demand. It is reasonable to expect that customers are connected in order to receive service, rather than being connected merely to be connected. Since a utility distribution system is constructed to provide service, and customers are connected to receive that service, it is appropriate to charge customers for the use of shared equipment within that distribution system according to their demand upon the distribution system, rather than charging a given customer by the number of connections within that customer's class. For customer-specific equipment, such as meters, it is appropriate to charge customers according to their customer class because that equipment is used by individual customers, and is not shared as part of the common distribution system.

To a large extent, the zero-intercept method attempts to charge customers for shared equipment according to the connections of a given customer class to the distribution system, rather than the demand placed upon the distribution system by that customer class. As described in the National Association of Regulatory Utility Commissioners' Electric Utility Cost Allocation Manual ("NARUC Manual") on page 92, the minimum-intercept (a/k/a zero-intercept) method "seeks to identify that portion of plant related to a hypothetical no-load

or zero-intercept situation." The concept of finding the cost of a no-load distribution system is irrelevant because the purpose of a distribution system is to serve utility demand. Since the concept of a no-load distribution system is irrelevant, the purpose of applying the zero-intercept concept is vague.

Q. Ameren witness Cooper describes a situation which he believes demonstrates the necessity of using the zero-intercept method. Are there any factors not built into his example which might affect whether the zero-intercept method accurately depicts the costs of serving a single large customer whose load is the same as the sum of many small customers?

A. A large customer may be one of only a few customers, if not the only customer, served by the primary voltage distribution line and associated equipment serving that customer. Customer density is higher for a given length of primary distribution line in the residential and commercial areas in Mr. Cooper's example. Under Ameren's proposed zero-intercept method of cost allocation, the residential and commercial customer classes would be responsible for a greater percentage of the investment, operations and maintenance of a similar length of primary distribution line merely because of a greater number of connections, even though the demand on the primary distribution line is the same. This would not be an appropriate result, particularly when considering that further build-out of the primary residential line is more likely given more favorable local environmental factors compared to a large customer with the same demand as the combined residential area customers. Another factor to

consider would be the additional costs of a primary line to a large customer that is longer than the primary line serving the residential areas. These additional factors in considering Mr. Cooper's hypothetical example demonstrate that Mr. Cooper's example is food for hypothetical thought, but should not be considered as representative of the entire, integrated Ameren distribution systems.

In addition, Mr. Cooper's support for the zero-intercept method is somewhat overstated in his example by the inclusion of service lines as additional costs under the Staff demand-based method of interclass cost allocation. Mr. Cooper may have included service lines in his example as a result of a misstatement in the narrative of my direct testimony where I indicate that Overhead and Underground Services account numbers 369.1 and 369.2 were changed from customer-based costs to demand-based costs. The COSS that I presented considered Service lines as customer costs in full, as opposed to the Company's division of Service lines into customer and demand costs. As a customer cost in the Staff COSS, Service lines would not be an additional cost to the single large customer in Mr. Cooper's example. Instead, the additional costs of additional service lines would be based upon customer connections in a given rate class, which would have no effect upon the large customer in Mr. Cooper's example.

Schedule 2 - Rate Design

Q. Have you made any changes in your design of rates?

A. The only change that I made to the basic approach of dividing the COSS result for each rate class by applicable billing units was to reduce the distribution charge per kWh for AmerenCIPS DS-2 Primary below the comparable DS-2 Secondary rate. The reduction is not extremely large, but in response to Ameren witness Mill's concerns about rate migration and price signals, I reduced the DS-2 Primary distribution charge and increased the DS-2 Secondary distribution charge. This change should help to avoid an incentive to switch delivery voltages from primary to secondary based upon a difference in the distribution charge.

It should also be re-stated here that rates are different to reflect the change in Staff's recommended revenue requirement.

Metering Rates

Q. Ameren witness Difani has developed unbundled metering rates based upon the same test year as is being reviewed in this docket for delivery service rates. Have you reviewed Mr. Difani's proposed rates?

A. Yes, I have reviewed Mr. Difani's proposed unbundled metering rates and believe that the proposed rates are reasonable and consistent with the conclusions reached in the metering unbundling docket no. 99-0013. I have

included the revised unbundled metering rates in the determination of delivery services rates on Schedule 2.

Mr. Difani's revised unbundled metering rates include the residential DS-1 delivery services rate class which is not currently included in the definition of an eligible customer for metering services provided by an alternate provider. The AmerenCIPS and AmerenUE tariff sheets should be revised to include residential DS-1 customers as eligible for an alternative Meter Services Provider, and to separate the combined Delivery Services Customer Charge Rate into a Delivery Services Customer Charge and a Meter Charge.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

AMERENCIPS

DELIVERY SERVICES COST OF SERVICE ALLOCATION STUDY

YEAR: 12 MONTHS ENDED DECEMBER 31, 1999

TITLE: SUMMARY ('000's)

	=======	ALLOCATION BASIS	CIPS TOTAL	DS-1	DS-2(sec.)	DS-2(pri.)	DS-3(sec.)	DS-3(pri.)	DS-3(HV)	LTG.	SP. Contract
1	BASE REVENUE		$181,490	$97,942	$23,680	$700	$34,153	$16,977	$1,764	$5,930	$344
2	OTHER REVENUE		$6,230	$3,383	$891	$25	$1,095	$576	$63	$197	$0
3	OTHER RENTS-IL. ONLY		$0	$0	$0	$0	$0	$0	$0	$0	$0
4	OTHER RENTS - IL. ONLY		$0	$0	$0	$0	$0	$0	$0	$0	$0
5											
6	TOTAL OPERATING REVENUE		$187,721	$101,325	$24,570	$725	$35,248	$17,554	$1,828	$6,127	$344
7											
8											
9	TOTAL DISTRIBUTION, CUSTOMER, AND A&G EXPENSES		$80,987	$44,695	$10,028	$286	$15,065	$7,396	$789	$2,605	$124
10	TOTAL DEPRECIATION AND AMMORTIZATION EXPENSES		$35,566	$18,833	$4,836	$142	$6,707	$3,344	$323	$1,307	$74
11	REAL ESTATE AND PROPERTY TAXES		$12,012	$6,299	$1,653	$49	$2,292	$1,142	$109	$442	$26
12	INCOME TAXES		$18,595	$9,876	$2,540	$79	$3,528	$1,790	$191	$552	$38
13	PAYROLL TAXES		$2,171	$1,232	$269	$7	$373	$187	$19	$80	$3
14											
15	TOTAL OPERATING EXPENSES		$149,330	$80,935	$19,325	$563	$27,965	$13,859	$1,432	$4,986	$265
16											
17	NET OPERATING INCOME		$38,390	$20,390.48	$5,245.04	$162.34	$7,282.96	$3,694.62	$395.31	$1,140.56	$78.91
18											
19											
20	GROSS PLANT IN SERVICE		$864,167	$453,154	$118,909	$3,530	$164,911	$82,179	$7,863	$31,776	$1,845
21	RESERVES FOR DEPRECIATION		$380,686	$197,809	$51,768	$1,509	$72,965	$35,883	$3,025	$16,878	$848
22											
23	NET PLANT IN SERVICE		483,480	255,344	67,142	2,020	91,946	46,295	4,838	14,898	997
24											
25											
26	MATERIALS & SUPPLIES - FUEL		$0	$0	$0	$0	$0	$0	$0	$0	$0
27	MATERIALS & SUPPLIES -LOCAL		$7,635	$3,986	$1,056	$31	$1,465	$730	$70	$281	$17
28	CASH WORKING CAPITAL		$4,846	$2,674	$600	$17	$901	$443	$47	$156	$7
29	CUSTOMER ADVANCES & DEPOSITS		($3,326)	($1,015)	($1,396)	$0	($744)	($170)	$0	($2)	$0
30	ACCUMULATED DEFERRED INCOME TAXES		($98,728)	($51,771)	($13,585)	($403)	($18,841)	($9,389)	($898)	($3,630)	($211)
31											
32	TOTAL NET ORIGINAL COST RATE BASE		$393,908	$209,219	$53,817	$1,666	$74,728	$37,909	$4,056	$11,703	$810
33											
34	RATE OF RETURN		9.75%	9.75%	9.75%	9.75%	9.75%	9.75%	9.75%	9.75%	9.75%

AmerenCIPS
Delivery Services Rate Design
For the pro forma test year ended December 31, 1999

	DS-1	DS-2 (secondary)	DS-2 (primary)	DS-3 (secondary)	DS-3 (primary)	DS-3 (HV)	Lighting	Special Contract	Total
Customer Charge									
Total Revenues	$ 35,750.405	$ 7,380.072	$ 191.861	$ 9,461.751	$ 3,966.997	$ 475.871	$1,025.288	$ 88.901	$ 58,341.15
Less: Other Revenues	(423.635)	(111.669)	(3.538)	(38.716)	(12.097)	(5.947)	0.003	-	$ (595.60)
Base Revenues	$ 35,326.769	$ 7,268.403	$ 188.323	$ 9,423.034	$ 3,954.900	$ 469.924	$1,025.291	$ 88.901	$ 57,745.55
Divided by:									
Billing Units	3,317,340	492,420	1,176	64,032	3,684	216		12	
	$ 10.65	$ 14.75	$ 160.14	$ 147.16	$ 1,073.53	$ 2,175.57	#DIV/0!	$7,408.43	
Staff Revenue Requirement Adjustment Factor	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	
Combined Customer Charge	$ 9.61	$ 13.29	$ 144.17	$ 132.40	$ 966.84	$ 1,959.55	#DIV/0!	$6,673.10	
Less: Metering Charge	(2.57)	(4.66)	(30.28)	(20.93)	(48.93)	(66.52)		(149.40)	
Customer Charge per month	$ 7.04	$ 8.63	$ 113.89	$ 111.47	$ 917.91	$ 1,893.03	#DIV/0!	$6,523.70	
Revenue Recovery	$ 31,879,637 (2)	$ 6,544,262 (2)	$ 169,544 (2)	$ 8,477,837 (2)	$ 3,561,839 (2)	$ 423,263 (2)		$ 80,077 (2)	$ 51,136,458
Staff Customer-related Revenues	$ 31,821,191 (3)	$ 6,547,138 (3)	$ 169,635 (3)	$ 8,487,959 (3)	$ 3,562,444 (3)	$ 423,292 (3)		$ 80,079 (3)	$ 51,091,739
Excess/(Deficit)	$ 58,446	$ (2,876)	$ (91)	$ (10,122)	$ (605)	$ (29)		$ (2)	$ 44,720
Demand Charge									
Total Revenues	$ 65,574.820	$ 17,190.402	$ 533.066	$25,785.811	$13,586.512	$1,351.929	$5,101.652	$ 255.341	$ 129,379.53
Less: Other Revenues	(2,959.519)	(779.164)	(21.800)	(1,056.023)	(563.926)	(57.357)	(196.768)	(0.080)	$ (5,634.64)
Base Revenues	$ 62,615.301	$ 16,411.238	$ 511.266	$24,729.788	$13,022.585	$1,294.572	$4,904.884	$ 255.261	$ 123,744.90
Divided by:									
Billing Units	2,831,848,723	954,270,314	29,584,264	4,780,104	3,836,004	968,422		809,274	
	$ 0.0221	$ 0.0172	$ 0.0173	$ 5.1735	$ 3.3948	$ 1.3368	#DIV/0!	$ 0.3154	
Staff Revenue Requirement Adjustment Factor	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	0.90077 (1)	
Energy or Demand Charge	$ 0.0199 per kWh of Energy	$ 0.0155 per kWh of Energy	$ 0.0154 per kWh of Energy	$ 4.6601 per kW of Demand	$ 3.0579 per kW of Demand	$ 1.2041 per kW of Demand	#DIV/0! per kW of Demand	$ 0.2841 per kW of Demand	
Revenue Recovery	$ 56,353,790	$ 14,791,190	$ 455,598	$22,275,763	$11,730,117	$1,166,077		$ 229,915	$107,002,448
Staff Demand-related Revenues	$ 56,401,803 (2)	$ 14,782,704 (2)	$ 460,532 (2)	$22,275,779 (2)	$11,730,316 (2)	$1,166,108 (2)		$ 229,931 (2)	$107,047,172
Excess/(Deficit)	$ (48,013)	$ 8,486	$ (4,934)	$ (17)	$ (200)	$ (31)		$ (16)	$ (44,724)
Customer and Demand Revenue Recovery	$ 88,233,427	$ 21,335,452	$ 625,142	$30,753,599	$15,291,955	$1,589,340		$ 309,992	$158,138,907
Staff Revenue Requirement	$ 88,222,994 (3)	$ 21,329,842 (3)	$ 630,167 (3)	$30,763,738 (3)	$15,292,760 (3)	$1,589,400 (3)		$ 310,010 (3)	$158,138,911
Excess/(Deficit)	$ 10,433	$ 5,610	$ (5,025)	$ (10,139)	$ (805)	$ (60)		$ (18)	$ (5)

(1) Staff Revenue Requirement $ 169,092,000
Divided by: Company Revenue Requirement $ 187,720,000
= Staff Revenue Requirement Adjustment Factor 0.90077

(2) Base Revenues x Staff Revenue Requirement Adjustment Factor

(3) = (Customer-related Base Revenue + Demand-related Base Revenue) x Staff Revenue Conversion Factor

AmerenCIPS
Delivery Services Rate Design
For the pro forma test year ended December 31, 1999

	DS-1	DS-2 (secondary)	DS-2 (primary)	DS-3 (secondary)	DS-3 (primary)	DS-3 (HV)	Lighting	Special Contract	Total
Customer Costs									
Rate Base	$ 24,617.51	$ 5,442.32	$ 195.21	$ 2,405.27	$ 575.38	$ 340.13	$ (1.72)	$ 78.79	$ 33,652.88
ROR	0.09746	0.09746	0.09746	0.09746	0.09746	0.09746	0.09746	0.09746	
Net Operating Income	$ 2,399.22	$ 530.41	$ 19.02	$ 234.42	$ 56.08	$ 33.15	$ (0.17)	$ 7.68	$ 3,279.81
Income Taxes	$ 1,162.08	$ 256.91	$ 9.21	$ 113.54	$ 27.16	$ 16.06	$ (0.08)	$ 3.72	$ 1,588.60
Operating and Maintenance Expenses	$ 32,189.10 (1)	$ 6,592.76 (1)	$ 163.62 (1)	$ 9,113.79 (1)	$ 3,883.76 (1)	$ 426.67 (1)	$ 1,025.54 (1)	$ 77.50 (1)	$ 53,472.74
Total Revenues	$ 35,750.40	$ 7,380.07	$ 191.86	$ 9,461.75	$ 3,967.00	$ 475.87	$ 1,025.29	$ 88.90	$ 58,341.15
Demand Costs									
Rate Base	$ 184,601.48	$ 48,375.00	$ 1,470.53	$ 72,322.40	$ 37,333.73	$ 3,716.04	$11,704.62	$ 730.92	$ 360,254.72
ROR	0.09746	0.09746	0.09746	0.09746	0.09746	0.09746	0.09746	0.09746	
Return	$ 17,991.26	$ 4,714.63	$ 143.32	$ 7,048.54	$ 3,638.55	$ 362.17	$ 1,140.73	$ 71.24	$ 35,110.43
Income Taxes	$ 8,714.18	$ 2,283.56	$ 69.42	$ 3,414.00	$ 1,762.35	$ 175.42	$ 552.52	$ 34.50	$ 17,005.95
Operating and Maintenance Expenses	$ 38,869.38	$ 10,192.22	$ 320.33	$ 15,323.27	$ 8,185.61	$ 814.35	$ 3,408.40	$ 149.60	$ 77,263.15
Total Revenues	$ 65,574.82	$ 17,190.40	$ 533.07	$ 25,785.81	$ 13,586.51	$ 1,351.93	$ 5,101.65	$ 255.34	$ 129,379.53
Combined Revenue Requirement	$ 101,325.22	$ 24,570.47	$ 724.93	$ 35,247.56	$ 17,553.51	$ 1,827.80	$ 6,126.94	$ 344.24	$ 187,720.68

(1) Operating and Maintenance Expenses

CUSTOMER-- DISTRIBUTION, CUSTOMER AND	$ 28,596.47	$ 5,750.87	$ 141.30	$ 8,600.86	$ 3,744.60	$ 386.08	$ 1,015.74	$ 67.93	$ 48,303.87
DEMAND -- DISTRIBUTION, CUSTOMER AND	$ 16,098.04	$ 4,276.97	$ 144.33	$ 6,463.98	$ 3,650.93	$ 403.11	$ 1,589.35	$ 56.32	$ 32,683.04
CUSTOMER -- DEPRECIATION AND AMORTIZA	$ 2,205.16	$ 553.01	$ 13.93	$ 267.48	$ 50.76	$ 24.30	$ -	$ 5.64	$ 3,105.21
DEMAND -- DEPRECIATION AND AMORTIZA	$ 16,627.40	$ 4,282.55	$ 128.12	$ 6,439.44	$ 3,293.73	$ 298.75	$ 1,307.47	$ 68.07	$ 32,460.61
CUSTOMER -- NET RATE BASE	$ 24,617.51	$ 5,442.32	$ 195.21	$ 2,405.27	$ 575.38	$ 340.13	$ (1.72)	$ 78.79	$ 33,548.85
DEMAND -- NET RATE BASE	$ 184,601.48	$ 48,375.00	$ 1,470.53	$ 72,322.40	$ 37,333.73	$ 3,716.04	$11,704.62	$ 730.92	$ 360,358.76
REAL ESTATE & PROPERTY TAXES	$ 6,298.94	$ 1,652.87	$ 49.06	$ 2,292.30	$ 1,142.31	$ 109.30	$ 441.69	$ 25.65	$ 12,012.12
CUSTOMER	$ 741.16	$ 167.15	$ 5.75	$ 73.78	$ 17.34	$ 9.17	$ (0.06)	$ 2.50	$ 1,023.06
DEMAND	$ 5,557.79	$ 1,485.72	$ 43.31	$ 2,218.52	$ 1,124.97	$ 100.13	$ 441.76	$ 23.15	$ 10,989.06
CUST. -- DISTRIB., CUST. AND A&G LABOR	$ 9,370.42	$ 1,872.14	$ 44.25	$ 2,919.40	$ 1,187.11	$ 121.83	$ 149.37	$ 21.12	$ 15,685.65
DEMAND. -- DISTRIB., CUST. AND A&G LABOR	$ 8,498.12	$ 2,260.43	$ 76.59	$ 3,423.64	$ 1,937.47	$ 211.65	$ 1,057.91	$ 30.33	$ 17,496.17
PAYROLL TAXES	$ 1,232.46	$ 268.71	$ 7.21	$ 373.00	$ 187.05	$ 19.47	$ 79.67	$ 3.49	$ 2,171.05
CUSTOMER	$ 646.32	$ 121.73	$ 2.64	$ 171.67	$ 71.07	$ 7.11	$ 9.86	$ 1.43	$ 1,026.30
DEMAND	$ 586.15	$ 146.98	$ 4.57	$ 201.32	$ 115.98	$ 12.36	$ 69.82	$ 2.06	$ 1,144.76

(2) = Customer + Demand

AMERENUE

DELIVERY SERVICES COST OF SERVICE ALLOCATION STUDY

YEAR: 12 MONTHS ENDED DECEMBER 31, 1999

TITLE: SUMMARY

	=======	ALLOCATION BASIS	UE TOTAL	DS-1	DS-2	DS-3	DS-4	DS-4 (HV)	DS-4 (HV-2)	LIGHTING
1	BASE REVENUE		$33,835.478	$15,980.353	$4,713.160	$3,729.924	$5,036.585	$1,340.201	$735.621	$2,299.568
2	OTHER REVENUE		$416.943	$324.748	$44.947	$14.669	$17.088	$4.762	$2.622	$8.107
3	OTHER RENTS-IL. ONLY		$0.000	$0.000	$0.000	$0.000	$0.000	$0.000	$0.000	$0.000
4	OTHER RENTS - IL. ONLY		$0.000	$0.000	$0.000	$0.000	$0.000	$0.000	$0.000	$0.000
5										
6	TOTAL OPERATING REVENUE		$34,252.421	$16,305.101	$4,758.107	$3,744.594	$5,053.673	$1,344.963	$738.243	$2,307.675
7										
8										
9	TOTAL DISTRIBUTION, CUSTOMER, AND A&G EXPENSES		$13,428	$7,033	$1,791	$1,273	$1,845	$472	$262	$753
10	TOTAL DEPRECIATION AND AMMORTIZATION EXPENSES		$6,515	$2,933	$944	$790	$970	$268	$148	$462
11	REAL ESTATE AND PROPERTY TAXES		$3,857	$1,706	$564	$480	$580	$162	$89	$275
12	INCOME TAXES		$4,517	$1,986	$632	$524	$721	$193	$105	$355
13	PAYROLL TAXES		$370	$200	$48	$31	$48	$12	$7	$24
14										
15	TOTAL OPERATING EXPENSES		$28,687	$13,858	$3,979	$3,099	$4,165	$1,107	$609	$1,870
16										
17	NET OPERATING INCOME		$5,565	$2,447	$779	$646	$889	$238	$129	$438
18										
19										
20	GROSS PLANT IN SERVICE		$150,511	$66,585	$22,011	$18,734	$22,649	$6,312	$3,476	$10,745
21	RESERVES FOR DEPRECIATION		$88,139	$39,257	$13,023	$11,323	$12,850	$3,678	$2,046	$5,960
22										
23	NET PLANT IN SERVICE		62,372	27,328	8,987	7,410	9,799	2,634	1,429	4,785
24										
25										
26	MATERIALS & SUPPLIES - FUEL		$0	$0	$0	$0	$0	$0	$0	$0
27	MATERIALS & SUPPLIES -LOCAL		$1,135	$496	$167	$144	$172	$48	$27	$81
28	CASH WORKING CAPITAL		$464	$243	$62	$44	$64	$16	$9	$26
29	CUSTOMER ADVANCES & DEPOSITS		($679)	($207)	($285)	($152)	($35)	$0	$0	($0)
30	ACCUMULATED DEFERRED INCOME TAXES		($11,817)	($5,228)	($1,728)	($1,471)	($1,778)	($496)	($273)	($844)
31										
32	TOTAL NET ORIGINAL COST RATE BASE		$51,476	$22,631	$7,204	$5,976	$8,222	$2,203	$1,192	$4,048
33										
34	RATE OF RETURN		10.811%	10.811%	10.811%	10.811%	10.811%	10.811%	10.811%	10.811%

AmerenUE
Delivery Services Rate Design
For the pro forma test year ended December 31, 1999

Line No.		DS-1	DS-2	DS-3	DS-4	DS-4 (HV)	DS-4 (HV 2)	Lighting	Total
	Customer Charge								
1	Total Revenues	$ 7,033.647	$ 1,463.838	$ 716.581	$ 934.765	$ 259.922	$ 125.562	$ 297.045	$ 10,831.36
2	Less: Other Revenues	(215.699)	(20.539)	(0.988)	(0.603)	(0.198)	(0.040)	(0.005)	(238.071)
3	Base Revenues	$ 6,817.948	$ 1,443.300	$ 715.593	$ 934.162	$ 259.724	$ 125.522	$ 297.040	$ 10,593.29
	Divided by:								
4	Billing Units	650,688	83,820	3,264	720	36	24		
5		$ 10.48	$ 17.22	$ 219.24	$ 1,297.45	$ 7,214.55	$ 5,230.10		
	Staff Revenue Requirement								
6	Adjustment Factor	0.84458 (1)	0.84458 (1)	0.84458 (1)	0.84458 (1)	0.84458 (1)	0.84458 (1)		
7	Combined Customer Charg	$ 8.83	$ 14.38	$ 185.17	$ 1,095.70	$ 6,093.12	$ 4,417.25		
8	Less: Metering Charge	(3.16)	(5.06)	(13.74)	(61.38)	(203.91)	(53.19)		
9	Customer Charge per mont	$ 5.67	$ 9.32	$ 171.43	$ 1,034.32	$ 5,889.21	$ 4,364.06		
10	Revenue Recovery	$ 5,745,575	$ 1,205,332	$ 604,395	$ 788,904	$ 219,352	$ 106,014		$ 8,669,572
11	Staff Customer-related Revenues	$ 5,758,315 (2)	$ 1,218,984 (2)	$ 604,377 (2)	$ 788,977 (2)	$ 219,358 (2)	$ 106,014 (2)		$ 8,696,024
12	Excess/(deficit)	$ (12,739)	$ (13,653)	$ 18	$ (73)	$ (6)	$ 0		$ (26,452)
	Demand Charge								
13	Total Revenues	$ 9,271.454	$ 3,294.269	$ 3,028.013	$ 4,118.908	$ 1,085.041	$ 612.681	$ 2,010.629	$ 21,410.37
14	Less: Other Revenues	(109.049)	(24.408)	(13.681)	(16.485)	(4.564)	(2.583)	(8.102)	(178.872)
15	Base Revenues	$ 9,162.405	$ 3,269.861	$ 3,014.331	$ 4,102.423	$ 1,080.477	$ 610.099	$ 2,002.528	$ 23,242.12
	Divided by:								
16	Billing Units	605,549,000	280,351,000	865,761	1,750,450	1,739,559	1,077,268		
17		$ 0.0151	$ 0.0117	$ 3.4817	$ 2.3437	$ 0.6211	$ 0.5663		
	Staff Revenue Requirement								
18	Adjustment Factor	0.84458 (1)	0.84458 (1)	0.84458 (1)	0.84458 (1)	0.84458 (1)	0.84458 (1)		
19	Energy or Demand Charge	$ 0.0128 per kWh of Energy	$ 0.0099 per kWh of Energy	$ 2.9406 per kW of Demand	$ 1.9794 per kW of Demand	$ 0.5246 per kW of Demand	$ 0.4783 per kW of Demand		
20	Revenue Recovery	$ 7,751,027	$ 2,775,475	$ 2,545,857	$ 3,464,841	$ 912,573	$ 515,257		
21	Staff Demand-related Revenues	$ 7,738,399 (2)	$ 2,761,665 (2)	$ 2,545,849 (2)	$ 3,464,832 (2)	$ 912,551 (2)	$ 515,278 (2)		
22	Excess/(deficit)	$ 12,628	$ 13,810	$ 8	$ 9	$ 22	$ (21)		
21	Customer and Demand Revenue Recovery	$13,496,602	$ 3,980,807	$ 3,150,252	$ 4,253,745	$ 1,131,925	$ 621,271		$ 26,634,601
22	Staff Class Base Revenue Requirement	$13,496,714 (3)	$ 3,980,649 (3)	$ 3,150,226 (3)	$ 4,253,808 (3)	$ 1,131,909 (3)	$ 621,292 (3)		$ 26,634,598
23	Excess/(deficit)	$ (112)	$ 157	$ 26	$ (63)	$ 16	$ (21)		$ 3

(1) Staff Revenue Requirement $ 28,929,000
Divided by: Company Revenue Requirement $ 34,252,458
= Staff Revenue Requirement Adjustment Factor 0.84458

(2) Base Revenues x Staff Revenue Requirement Adjustment Factor

(3) = (Customer-related Base Revenue + Demand-related Base Revenue) x Staff Revenue Conversion Factor

AmerenUE
Delivery Services Rate Design
For the pro forma test year ended December 31, 1999

Line No.		DS-1	DS-2	DS-3	DS-4	DS-4 (HV)	DS-4 (HV 2)	Lighting	Total
	Customer Costs								
1	Rate Base	$ 4,258.01	$ 808.78	$ 187.23	$ 206.37	$ 243.21	$ 88.46	$ 3.56	$ 5,795.62
2	ROR	0.10811	0.10811	0.10811	0.10811	0.10811	0.10811	0.10811	
3	Net Operating Income	$ 460.33	$ 87.44	$ 20.24	$ 22.31	$ 26.29	$ 9.56	$ 0.38	$ 626.56
4	Income Taxes	$ 373.66	$ 70.97	$ 16.43	$ 18.11	$ 21.34	$ 7.76	$ 0.31	$ 508.59
5	Operating and Maintenance Expenses	$ 6,199.66 (1)	$ 1,305.43 (1)	$ 679.91 (1)	$ 894.35 (1)	$ 212.28 (1)	$ 108.24 (1)	$ 296.35 (1)	$ 9,696.21
6	Total Revenues	$ 7,033.65	$ 1,463.84	$ 716.58	$ 934.77	$ 259.92	$ 125.56	$ 297.05	$ 10,831.36
	Demand Costs								
7	Rate Base	$ 18,373.45	$ 6,394.80	$ 5,788.39	$ 8,015.27	$ 1,960.12	$ 1,103.37	$ 4,044.53	
8	ROR	0.10811	0.10811	0.10811	0.10811	0.10811	0.10811	0.10811	
9	Return	$ 1,986.35	$ 691.34	$ 625.78	$ 866.53	$ 211.91	$ 119.28	$ 437.25	$ 4,938.46
10	Income Taxes	$ 1,612.34	$ 561.17	$ 507.95	$ 703.37	$ 172.01	$ 96.82	$ 354.92	$ 4,008.58
11	Operating and Maintenance Expenses	$ 5,672.76	$ 2,041.76	$ 1,894.28	$ 2,549.01	$ 701.12	$ 396.57	$ 1,218.45	$ 14,473.95
12	Total Revenues	$ 9,271.45	$ 3,294.27	$ 3,028.01	$ 4,118.91	$ 1,085.04	$ 612.68	$ 2,010.63	$ 23,421.00
13	Combined Revenue Requirement	$ 16,305.10	$ 4,758.11	$ 3,744.59	$ 5,053.67	$ 1,344.96	$ 738.24	$ 2,307.67	$ 34,252.36
	(1) Operating and Maintenance Expenses								
14	CUSTOMER-- DISTRIBUTION, CUSTOMER AND A&G	$ 5,155.84	$ 1,083.56	$ 589.33	$ 838.76	$ 173.77	$ 93.63	$ 293.40	$ 8,228.29
15	DEMAND -- DISTRIBUTION, CUSTOMER AND A&G	$ 1,877.05	$ 707.84	$ 683.54	$ 1,006.42	$ 297.86	$ 167.89	$ 459.32	$ 5,199.99
16	CUSTOMER -- DEPRECIATION AND AMORTIZATION	$ 583.33	$ 131.56	$ 62.60	$ 21.28	$ 17.94	$ 6.59	$ 0.29	$ 812.03
17	DEMAND -- DEPRECIATION AND AMORTIZATION	$ 2,349.67	$ 812.33	$ 727.43	$ 948.39	$ 250.19	$ 141.07	$ 462.01	$ 5,702.63
18	CUSTOMER -- NET RATE BASE	$ 4,258.01	$ 808.78	$ 187.23	$ 206.37	$ 243.21	$ 88.46	$ 3.56	$ 5,721.56
19	DEMAND -- NET RATE BASE	$ 18,373.45	$ 6,394.80	$ 5,788.39	$ 8,015.27	$ 1,960.12	$ 1,103.37	$ 4,044.53	$ 45,754.00
20	REAL ESTATE & PROPERTY TAXES	$ 1,706.34	$ 564.06	$ 480.08	$ 580.42	$ 161.77	$ 89.07	$ 275.36	$ 3,857.10
21	CUSTOMER	$ 321.04	$ 63.33	$ 15.04	$ 14.57	$ 17.86	$ 6.61	$ 0.24	$ 428.72
22	DEMAND	$ 1,385.30	$ 500.73	$ 465.04	$ 565.85	$ 143.91	$ 82.46	$ 275.12	$ 3,428.38
23	CUST. -- DISTRIB., CUST. AND A&G LABOR	$ 1,968.75	$ 416.14	$ 218.05	$ 318.03	$ 44.13	$ 22.87	$ 37.00	$ 3,024.97
24	DEMAND. -- DISTRIB., CUST. AND A&G LABOR	$ 857.54	$ 321.75	$ 307.90	$ 456.86	$ 148.34	$ 83.61	$ 336.10	$ 2,512.11
25	PAYROLL TAXES	$ 200.18	$ 47.84	$ 31.20	$ 48.09	$ 11.89	$ 6.57	$ 24.43	$ 370.20
26	CUSTOMER	$ 139.44	$ 26.98	$ 12.94	$ 19.74	$ 2.73	$ 1.41	$ 2.42	$ 202.25
27	DEMAND	$ 60.74	$ 20.86	$ 18.27	$ 28.36	$ 9.16	$ 5.16	$ 22.01	$ 167.96